

State of California
The Resources Agency

DEPARTMENT OF WATER RESOURCES
Division of Operations and Maintenance

STATE WATER PROJECT OPERATIONS DATA

For the month of:
February 1998

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State of California

Douglas P. Wheeler
Secretary for Resources
The Resources Agency

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State of California
The Resources Agency

Department of Water Resources
Division of Operations and Maintenance

**State Water Project
Operations Data**
for the month of February 1998

Table of Contents

Monthly Highlights

Oroville Field Division Water Operations

Table

1	Antelope Lake, Daily Operation
2	Frenchman Lake, Daily Operation
3	Lake Davis, Daily Operation
4	Lake Oroville, Daily Operation
5	Thermalito Forebay, Including Diversion Pool and Power Canal, Daily Operation
6	Thermalito Afterbay, Daily Operation
7	Oroville-Thermalito Complex, Water Temperature Data

Delta Field Division Water Operations

Table

8	Aqueduct Operation, Delta Field Division
9	Delta Field Division Plant Data
10	Clifton Court Forebay, Daily Operation of Gates
11	Governor Edmund G. Brown California Aqueduct, Delta Field Division, Monthly Deliveries
12	South Bay Aqueduct, Delta Field Division, Monthly Deliveries
13	Lake Del Valle, Daily Operation

San Luis Field Division Water Operations

Table

14	Consolidated State-Federal O'Neill Forebay, Daily Operations
15	Consolidated State-Federal San Luis Reservoir, Daily Operations
16	San Luis Field Division Plant Data
17	Consolidated State-Federal Los Banos Reservoir, Daily Operations
18	Consolidated State-Federal Little Panoche Reservoir, Daily Operations
19a	Governor Edmund G. Brown California Aqueduct, San Luis Field Division, Monthly Deliveries
19b	Governor Edmund G. Brown California Aqueduct, San Luis Field Division, Monthly Deliveries
20	Consolidated State-Federal San Luis Canal, Daily Operations

San Joaquin Field Division Water Operations

Table

21	San Joaquin Field Division Plant Data
22a	Governor Edmund G. Brown California Aqueduct, San Joaquin Field Division, Monthly Deliveries
22b	Governor Edmund G. Brown California Aqueduct, San Joaquin Field Division, Monthly Deliveries
22c	Governor Edmund G. Brown California Aqueduct, San Joaquin Field Division, Monthly Deliveries
23	Governor Edmund G. Brown California Aqueduct, San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

Southern Field Division Water Operations

Table

24	Southern Field Division Plant Data
25	Pyramid Lake, Daily Operation
26	Elderberry Forebay, Daily Operation
27	Castaic Lake, Daily Operation
28	Governor Edmund G. Brown California Aqueduct, Southern Field Division, Monthly Deliveries (West Branch)
29	Silverwood Lake, Daily Operation
30	Lake Perris, Daily Operation
31a	Governor Edmund G. Brown California Aqueduct, Southern Field Division, Monthly Deliveries (East Branch)
31b	Governor Edmund G. Brown California Aqueduct, Southern Field Division, Monthly Deliveries (East Branch)

Water Quality Operations

Table

32	Water Quality at Selected SWP Locations
33	Water Quality at Selected Delta Stations
34	Pesticides, Herbicides, and Other Organic Substances Detected in the SWP

Energy Operations

Table

35	Oroville and Delta Field Divisions Energy Data
36	San Luis Field Division Energy Data
37	San Joaquin Field Division Pumping Plant Energy Load Data
38	Southern Field Division Energy Data

MONTHLY HIGHLIGHTS

The following highlights are activities or actions that impacted State Water Project operations during the month of February 1998.

A continuing series of El Niño driven storms which had delivered double the normal precipitation during January, did the same or more in February. Snowpack accumulations statewide have increased from about 75 percent of average on January 1 to around 180 percent.

Runoff peaks on major Sierra rivers were quite modest. Runoff statewide during February was nearly two and one-half times average, following a January which produced about 160 percent of the monthly average amount. Estimated seasonal runoff since October 1 is now about 150 percent of average. Last year's seasonal runoff was 230 percent of average at this time.

In-state reservoir storage was 116 percent of average, 71 percent of capacity. The 155 reservoir total was nearly 5 MAF less than last year's elevated level near the end of the second storm period. Most major Central Valley foothill reservoirs operated in flood control mode, excess waters were released in a controlled manner into the Sacramento and San Joaquin River systems. All Sacramento system fixed weirs flowed most of February, and 16 of 48 gates were opened in the Sacramento weir earlier in the month.

Total storage in major SWP reservoirs was about 4.5 MAF on February 28, compared with 4.39 MAF at this time in 1997. The average storage in the major SWP reservoirs on February 28 was 3.7 MAF. February 28 storage at Lake Oroville was about 2.7 MAF compared to 2.68 MAF at this time last year. The State's share of San Luis Reservoir storage was about 1.06 MAF, as compared with 1.08 MAF at this time last year. The combined storage in our southern reservoirs was 690,000 AF on February 28 compared with 607,000 AF at this time last year.

SWP water deliveries for 1998 through February 28 were 163,000 AF, representing a combination of annual entitlement, carryover, interruptible, and exchange waters, 47,000 AF more than that delivered during the same period in 1997.

A powerful storm on February 2nd and 3rd dumped heavy amounts of rain in the upper Sacramento Valley. West valley streams gushed large volumes of flow. A flood alert was declared and DWR staff were mobilized to provide flood-related forecasting and technical assistance as necessary. Thirty-five counties had received presidential disaster declarations by the end of the month. Flows into Clifton Court Forebay, pumping at Banks, and inflow into O'Neill from the California Aqueduct were all curtailed after February 2nd. Los Banos Reservoir filled to about 90 percent of capacity on February 3. The reservoir receded to around 66 percent of capacity by the end of the month after making nearly 37 TAF of flood control releases. There was nearly 96 TAF of flood gains and pump-in of non-project water into the Aqueduct in the Joint-use facilities area alone. West Branch Reservoirs Pyramid, Castaic, and Elderberry all filled to capacity in February. Low water demands by MWD and excessive storm run-off required stream releases during the first and last parts of the month.

From the 17th to the 23rd, approximately 800 AF was released into O'Neill Forebay through Check 12 as pools 10, 11, and 12 began dewatering to facilitate lining repairs. During the drawdown, it was determined that the embankment was unstable and repairs would be made using cofferdams to isolate the effected areas without draining the pools.

Numerous project repairs in February required curtailed pumping south of Check 21 including Edmonston which was limited to 660 cfs. Contractors worked on emergency canal repairs at mile Post 55 and Pool 48. Concrete liner panels at the Edmonston Pumping Plant Forebay became displaced during an inadvertent drawdown.

Table 1. Antelope Lake**Daily Operation**

(in acre-feet except as noted)

Capacity: 22,566 ac-ft

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow 1/
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/	Total Outflow 1/	
				Stream- flow Maint.	Water Supply Contract	Water Right				
Jan 31	4998.14	19,132								
1	4998.06	19,065	-67	67	0	0	0			
2	4998.07	19,073	8	67	0	0	0			
3	4998.08	19,081	8	67	0	0	0			
4	4998.05	19,056	-25	67	0	0	0			
5	4998.00	19,014	-42	67	0	0	0			
6	4997.93	18,955	-59	67	0	0	0			
7	4997.91	18,938	-17	67	0	0	0			
8	4997.85	18,888	-50	67	0	0	0			
9	4997.75	18,804	-84	67	0	0	0			
10	4997.66	18,729	-75	67	0	0	0			
11	4997.59	18,670	-59	67	0	0	0			
12	4997.49	18,587	-83	67	0	0	0			
13	4997.39	18,504	-83	67	0	0	0			
14	4997.31	18,437	-67	67	0	0	0			
15	4997.20	18,346	-91	67	0	0	0			
16	4997.11	18,272	-74	67	0	0	0			
17	4997.00	18,182	-90	67	0	0	0			
18	4996.91	18,108	-74	67	0	0	0			
19	4996.82	18,034	-74	67	0	0	0			
20	4996.69	17,928	-106	67	0	0	0			
21	4996.66	17,904	-24	67	0	0	0			
22	4996.56	17,823	-81	67	0	0	0			
23	4996.51	17,782	-41	67	0	0	0			
24	4996.36	17,661	-121	67	0	0	0			
25	4996.24	17,564	-97	67	0	0	0			
26	4996.12	17,468	-96	67	0	0	0			
27	4996.00	17,372	-96	67	0	0	0			
28	4995.87	17,268	-104	67	0	0	0			
Total cfs-days			- - - -	1,876	0	0	0	33	1,909	969
Total ac-ft			-1,864	3,721	0	0	0	66	3,787	1,923

1/ Values not available on a daily basis.

Table 2. Frenchman Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 55,477 ac-ft

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow 1/
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/	Total Outflow 1/	
				Stream- flow Maint.	Water Supply Contract	Water Right				
Jan 31	5578.75	42,030								
1	5578.77	42,057	27	3	0	0	0			
2	5578.87	42,190	133	3	0	0	0			
3	5578.93	42,271	81	3	0	0	0			
4	5578.95	42,297	26	3	0	0	0			
5	5579.00	42,364	67	3	0	0	0			
6	5579.04	42,418	54	3	0	0	0			
7	5579.15	42,565	147	3	0	0	0			
8	5579.18	42,606	41	3	0	0	0			
9	5579.19	42,619	13	3	0	0	0			
10	5579.23	42,673	54	3	0	0	0			
11	5579.27	42,727	54	3	0	0	0			
12	5579.30	42,767	40	3	0	0	0			
13	5579.32	42,794	27	3	0	0	0			
14	5579.37	42,861	67	3	0	0	0			
15	5579.40	42,902	41	3	0	0	0			
16	5579.43	42,942	40	3	0	0	0			
17	5579.47	42,996	54	3	0	0	0			
18	5579.49	43,023	27	3	0	0	0			
19	5579.52	43,064	41	3	0	0	0			
20	5579.53	43,077	13	3	0	0	0			
21	5579.63	43,213	136	3	0	0	0			
22	5579.69	43,294	81	3	0	0	0			
23	5579.79	43,430	136	3	0	0	0			
24	5579.80	43,444	14	3	0	0	0			
25	5579.82	43,471	27	3	0	0	0			
26	5579.83	43,484	13	3	0	0	0			
27	5579.84	43,498	14	3	0	0	0			
28	5579.82	43,471	-27	3	0	0	0			
Total cfs-days			- - -	84	0	0	0	47	131	858
Total ac-ft			1,441	167	0	0	0	93	260	1,701

1/ Values not available on a daily basis.

Table 3. Lake Davis

Daily Operation

(in acre-feet except as noted)

Capacity: 84,371 ac-ft

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in CFS						Computed Inflow
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/	Total Outflow 1/	
				Stream- flow Maint.	Water Supply Contract	Water Right				
Jan 31	5765.68	51,337								
1	5765.72	51,459	122	10	0	0	0			
2	5765.88	51,949	490	212	0	0	0			
3	5765.94	52,133	184	212	0	0	0			
4	5765.97	52,225	92	213	0	0	0			
5	5766.00	52,318	93	10	0	0	0			
6	5766.08	52,565	247	10	0	0	0			
7	5766.18	52,675	110	10	0	0	0			
8	5766.21	52,968	293	10	0	0	0			
9	5766.22	52,999	31	10	0	0	0			
10	5766.26	53,124	125	10	0	0	0			
11	5766.28	53,186	62	10	0	0	0			
12	5766.29	53,217	31	10	0	0	0			
13	5766.32	53,311	94	10	0	0	0			
14	5766.39	53,529	218	10	0	0	0			
15	5766.39	53,529	0	10	0	0	0			
16	5766.42	53,623	94	10	0	0	0			
17	5766.42	53,623	0	10	0	0	0			
18	5766.44	53,686	63	10	0	0	0			
19	5766.48	53,811	125	10	0	0	0			
20	5766.48	53,811	0	10	0	0	0			
21	5766.59	54,157	346	10	0	0	0			
22	5766.61	54,220	63	10	0	0	0			
23	5766.65	54,346	126	10	0	0	0			
24	5766.65	54,346	0	10	0	0	0			
25	5766.65	54,346	0	10	0	0	0			
26	5766.66	54,378	32	10	0	0	0			
27	5766.68	54,441	63	10	0	0	0			
28	5766.69	54,472	31	10	0	0	0			
Total cfs-days			- - -	887	0	0	0	109	389	1,970
Total ac-ft			3,135	1,759	0	0	0	217	772	3,907

1/ Values not available on a daily basis.

Table 4. Lake Oroville

Daily Operation

(in acre-feet except as noted)

Capacity: 3,537, 580 ac-ft

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow						Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal	Spillway Leakage 2/	Evaporation 3/	Spill	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 4/
Jan 31	838.34	2,654,963									
1	840.17	2,678,652	23,689	1,692	4	31	16	0	1,743	1,000	24,432
2	841.46	2,695,428	16,776	18,802	1	32	22	0	18,857	496	35,137
3	846.62	2,763,268	67,840	29,326	0	0	119	6,198	35,643	0	103,483
4	847.37	2,773,226	9,958	29,430	0	0	53	19,950	49,433	0	59,391
5	847.01	2,768,443	-4,783	29,699	0	0	15	19,917	49,631	0	44,848
6	847.71	2,777,749	9,306	29,681	0	0	8	19,835	49,524	0	58,830
7	848.78	2,792,017	14,268	29,615	0	0	38	19,240	48,893	0	63,161
8	848.87	2,793,220	1,203	29,626	0	0	0	20,132	49,758	0	50,961
9	847.95	2,780,945	-12,275	29,120	0	0	106	20,744	49,970	0	37,695
10	846.60	2,763,002	-17,943	29,698	0	0	30	19,835	49,563	0	31,620
11	845.25	2,745,141	-17,861	29,730	0	0	30	19,835	49,595	0	31,734
12	843.73	2,725,127	-20,014	29,774	0	0	52	19,901	49,727	0	29,713
13	842.35	2,707,045	-18,082	29,812	0	0	0	16,818	46,630	0	28,548
14	842.60	2,710,315	3,270	29,636	0	0	52	4,959	34,647	0	37,917
15	843.10	2,716,862	6,547	27,243	0	39	22	0	27,304	0	33,851
16	843.16	2,717,648	786	27,158	0	38	52	0	27,248	0	28,034
17	843.04	2,716,076	-1,572	27,509	0	38	0	0	27,547	0	25,975
18	842.64	2,710,838	-5,238	29,069	0	38	37	0	29,144	0	23,906
19	842.83	2,713,325	2,487	28,208	0	38	52	0	28,298	0	30,785
20	842.90	2,714,242	917	27,333	0	38	37	0	27,408	0	28,325
21	843.46	2,721,583	7,341	26,832	0	38	0	0	26,870	0	34,211
22	843.89	2,727,229	5,646	25,656	0	38	22	0	25,716	0	31,362
23	844.08	2,729,726	2,497	28,422	0	38	52	0	28,512	0	31,009
24	844.22	2,731,568	1,842	26,744	0	38	45	0	26,827	0	28,669
25	844.06	2,729,463	-2,105	26,558	0	38	82	0	26,678	0	24,573
26	843.75	2,725,390	-4,073	26,263	0	38	74	0	26,375	0	22,302
27	843.40	2,720,795	-4,595	25,336	0	38	67	0	25,441	0	20,846
28	842.87	2,713,849	-6,946	26,201	0	38	74	0	26,313	0	19,367
Total			58,886	754,173	5	596	1,157	207,364	963,295	1,496	1,020,685

1/ Includes bypass flows

2/ Only occurs when Lake water elevation is greater than or equal to 813.00 and there is no spill.

3/ Evaporation will be zero for days when there is precipitation or heavy overcast.

4/ Does not include pumpback.

**Table 5. Thermalito Forebay
Including Diversion Pool and Power Canal**

Daily Operation
(in acre-feet except as noted)

Capacity: 25,120 ac-ft

February 1998

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County	Thermalito Irrigation District	Releases To River 4/	Hyatt Powerplant Pumpback	
Jan 31	23,176										
1	23,551	375	1,723	514	2,177	1,404	2	4	1,898	1,000	269
2	23,640	89	18,834	617	1,056	19,174	2	4	2,002	496	1,260
3	23,504	-136	35,524	393	0	29,634	2	3	8,829	0	2,415
4	23,513	9	49,380	506	0	29,608	2	3	19,976	0	-288
5	23,434	-79	49,616	508	0	29,909	2	3	19,976	0	-313
6	23,739	305	49,516	504	0	29,931	2	3	20,174	0	395
7	23,283	-456	48,855	569	0	29,894	2	3	19,976	0	-6
8	23,524	241	49,758	502	0	29,396	2	3	19,976	0	-642
9	23,711	187	49,864	440	0	29,312	2	3	20,174	0	-627
10	23,812	101	49,533	506	0	29,024	2	3	20,174	0	-735
11	23,612	-200	49,565	506	0	29,292	2	3	20,174	0	-800
12	23,370	-242	49,675	502	0	29,836	2	3	20,174	0	-404
13	23,644	274	46,630	498	0	29,937	2	3	16,644	0	-268
14	23,764	120	34,595	508	0	29,424	2	3	6,488	0	934
15	23,673	-91	27,282	506	0	27,039	2	3	1,817	0	982
16	23,293	-380	27,196	500	0	27,061	2	3	1,815	0	805
17	23,221	-72	27,547	514	0	27,041	1	3	1,770	0	682
18	23,143	-78	29,107	506	0	28,281	1	3	1,792	0	386
19	23,546	403	28,246	528	0	27,597	1	3	1,823	0	1,053
20	23,526	-20	27,371	486	0	26,707	1	3	1,851	0	685
21	23,867	341	26,870	504	0	26,570	1	3	1,847	0	1,388
22	23,689	-178	25,694	561	0	25,231	1	3	1,829	0	631
23	23,268	-421	28,460	446	0	28,402	1	3	1,847	0	926
24	23,581	313	26,782	504	0	25,758	1	3	1,825	0	614
25	22,985	-596	26,596	506	0	26,398	1	3	1,794	0	498
26	23,363	378	26,301	508	0	25,125	1	3	1,792	0	490
27	23,832	469	25,374	496	0	24,095	1	3	1,792	0	490
28	23,415	-417	26,239	505	0	25,765	1	3	1,794	0	402
Total		239	962,133	14,140	3,233	746,845	44	86	242,015	1,496	11,220

1/ Sum of Thermalito Forebay and Diversion Pool.

2/ Sum of releases from Lake Oroville through Hyatt plant, spill, and spillway leakage.

3/ Includes Bypass flows at Thermalito.

4/ The sum of the flows from fish barrier dam and the fish hatchery.

Table 6. Thermalito Afterbay

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow	Outflow						Losses (-) and Gains (+)	Total Releases to River 2/
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback		
Jan 31	131.58	37,603										
1	128.35	26,889	-10,714	1,404	0	0	0	0	10,195	2,177	254	12,093
2	130.04	32,285	5,396	19,174	0	0	0	0	13,468	1,056	746	15,470
3	130.53	33,936	1,651	29,634	0	0	0	0	28,562	0	579	37,391
4	130.37	33,392	-544	29,608	0	0	0	0	29,951	0	-201	49,927
5	130.33	33,257	-135	29,909	0	0	0	0	29,951	0	-93	49,927
6	130.50	33,833	576	29,931	0	0	0	0	29,951	0	596	50,125
7	130.53	33,936	103	29,894	0	0	0	0	29,951	0	160	49,927
8	130.25	32,987	-949	29,396	0	0	0	0	29,951	0	-394	49,927
9	130.00	32,151	-836	29,312	0	0	0	0	29,951	0	-197	50,125
10	129.73	31,260	-891	29,024	0	0	0	0	29,951	0	36	50,125
11	129.46	30,380	-880	29,292	0	0	0	0	29,951	0	-221	50,125
12	129.51	30,542	162	29,836	0	0	0	0	29,951	0	277	50,125
13	129.45	30,348	-194	29,937	0	0	0	0	29,951	0	-180	46,595
14	129.77	31,391	1,043	29,424	0	0	0	0	28,761	0	380	35,249
15	129.92	31,886	495	27,039	0	0	0	0	26,182	0	-362	27,999
16	130.19	32,786	900	27,061	0	0	0	0	26,182	0	21	27,997
17	130.33	33,257	471	27,041	0	0	0	0	26,182	0	-388	27,952
18	130.89	35,173	1,916	28,281	0	0	0	0	26,182	0	-183	27,974
19	131.32	36,679	1,506	27,597	0	0	0	0	26,182	0	91	28,005
20	131.45	37,140	461	26,707	0	0	0	0	26,182	0	-64	28,033
21	131.64	37,818	678	26,570	0	0	0	0	26,182	0	290	28,029
22	131.29	36,573	-1,245	25,231	0	0	0	0	26,182	0	-294	28,011
23	131.87	38,647	2,074	28,402	0	0	0	0	26,182	0	-146	28,029
24	131.66	37,890	-757	25,758	0	0	0	0	26,182	0	-333	28,007
25	131.65	37,854	-36	26,398	0	0	0	0	26,182	0	-252	27,976
26	131.32	36,679	-1,175	25,125	0	0	0	0	26,182	0	-118	27,974
27	130.70	34,517	-2,162	24,095	0	0	0	0	26,182	0	-75	27,974
28	130.51	33,867	-650	25,765	0	0	0	0	26,182	0	-233	27,976
Total			-3,736	746,845	0	0	0	0	747,044	3,233	-304	989,059

1/ Includes Bypass flows at Thermalito.

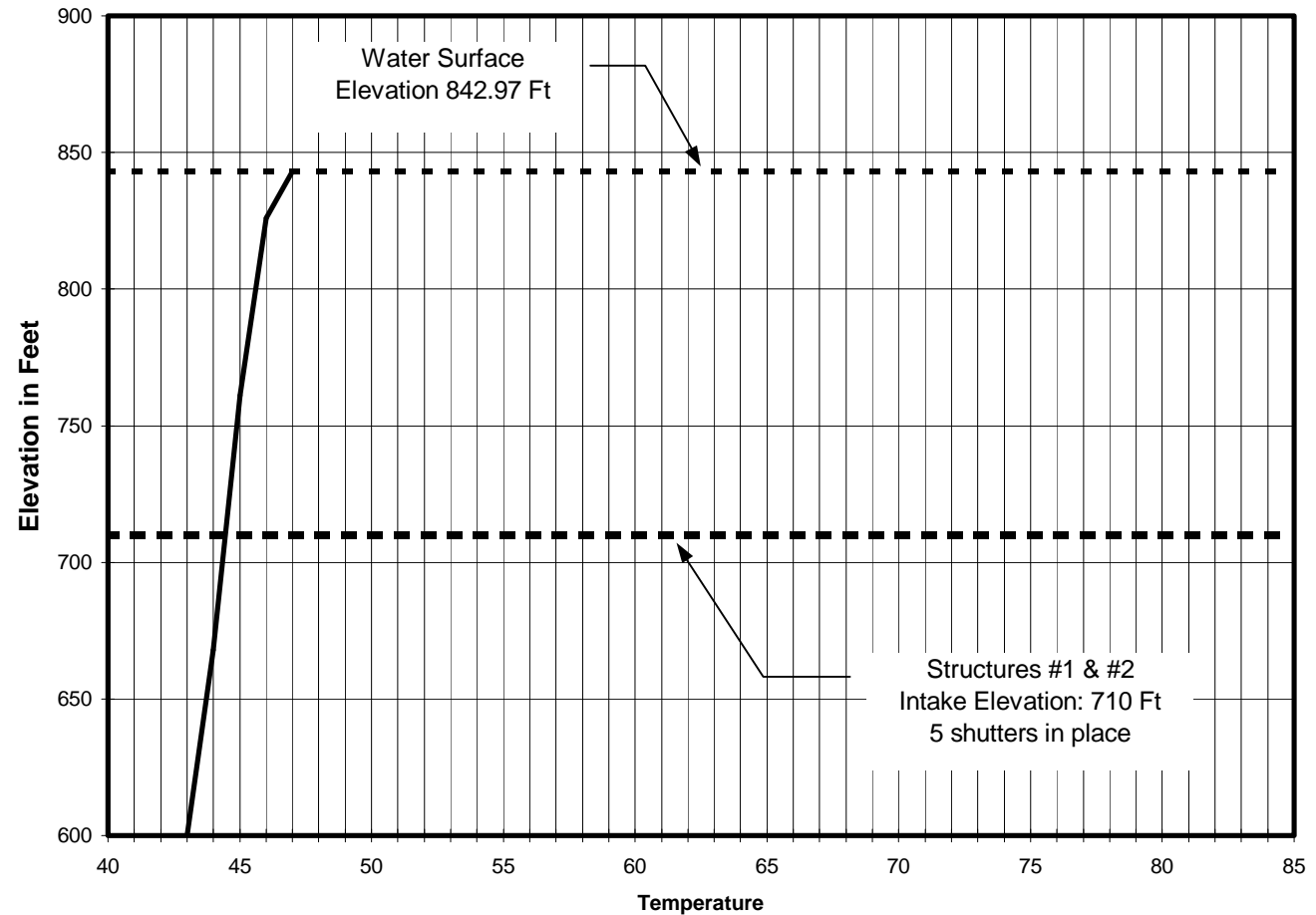
2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

Table 7. Oroville-Thermalito Complex

Water Temperature Data
(in degrees Fahrenheit)
February 1998

Date	Mean Daily Temperature	
	Thermalito Afterbay Outlet	Fish Hatchery
1	46	46
2	46	46
3	46	46
4	46	47
5	46	47
6	46	47
7	46	46
8	46	46
9	46	46
10	46	46
11	46	46
12	46	46
13	46	46
14	46	46
15	46	45
16	45	46
17	45	45
18	45	46
19	45	45
20	45	45
21	45	45
22	45	45
23	45	45
24	45	46
25	45	46
26	46	46
27	46	46
28	47	46

**Lake Oroville Temperature Profile
on February 18, 1998**



Note: Water surface elevations on Table 4 are taken at Oroville Dam at midnight and may differ slightly from those shown on this table which are normally taken at mid-day and upstream from Oroville Dam.

**Table 8. Aqueduct Operation
Delta Field Division**

(in acre-feet except as noted)

February 1998

<u>North Bay Aqueduct</u>	
Pumped at Barker Slough Pumping Plant	<u>2,589</u>
Travis Turnout	<u>97</u>
Fairfield/Vacaville Turnout	<u>886</u>
Pumped at Cordelia Pumping Plant	<u>1,541</u>
Cordelia Pumping Plant Spillway	<u>0</u>
Computed Losses (-) or Gains (+)	<u>-65</u>
Benicia Turnout	<u>738</u>
Vallejo Turnout	<u>0</u>
American Canyon 1	<u>72</u>
American Canyon 2	<u>0</u>
Napa Treatment Plant	<u>731</u>
Total Deliveries (After Cordelia)	<u>1,541</u>
Change in Storage at Napa Terminal Tank	<u>0</u>
<u>California Aqueduct</u>	
Amount Pumped at Banks Pumping Plant	<u>7,285</u>
Amount Pumped at South Bay Pumping Plant	<u>364</u>
Deliveries From California Aqueduct (Oak Flat Water District, Tracy Golf, Veterans Cemetery, and Muscoy)	<u>29</u>
Inflow into California Aqueduct	<u>0</u>
Change in Storage	<u>-77</u>
Flow Past Check 12	<u>8,340</u>
Computed Losses (-) or Gains (+)	<u>1,371</u>

Table 9. Delta Field Division Plant Data

(in acre-feet)

February 1998

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct		
	Barker Slough	Cordelia	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant	
	Pumping Plant	Pumping Plant	Total	SWP		Into Lake	Into Aqueduct
1	29	35	4,128	4,128	5	0	0
2	73	38	2,854	2,854	3	0	0
3	84	28	0	0	0	0	0
4	102	51	0	0	0	0	0
5	107	62	0	0	0	0	0
6	87	48	0	0	0	0	0
7	91	59	0	0	24	0	0
8	94	54	0	0	0	0	0
9	103	64	0	0	0	0	0
10	94	54	0	0	19	0	0
11	93	51	0	0	40	0	0
12	103	60	0	0	4	0	0
13	97	60	0	0	20	0	0
14	88	59	0	0	21	0	0
15	95	57	0	0	15	0	0
16	97	54	0	0	16	0	0
17	96	59	0	0	27	0	0
18	103	59	0	0	14	0	0
19	80	59	0	0	11	0	0
20	100	55	0	0	20	0	0
21	92	59	0	0	14	0	0
22	94	59	0	0	17	0	0
23	95	59	0	0	16	0	0
24	106	64	0	0	17	0	0
25	96	58	0	0	17	0	0
26	96	58	303	303	16	0	0
27	102	60	0	0	11	0	0
28	92	58	0	0	17	0	0
Total	2,589	1,541	7,285	7,285	364	0	0

Daily Operation of Gate:

[illegible]

Table 11. Governor Edmund G. Brown California Aqueduct

Delta Field Division, Monthly Deliveries

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries								
	Beginning and Ending					Entitle- ment	USBR	Misc.	Loan Water	1997 Carryover Ent.				
	No.	Structure	Mile											
1	1	Banks Pumping Plant	3.32		7,285		28							
2A		1	South Bay Pumping Plant	4.49	Bethany Reservoir Inlet						364			
	Check No. 1		5.95											
	2	Check No. 2	12.01											
	3		12.47	Musco Olive	28									
		Check No. 3	18.29											
	4		22.16	Tracy Golf & Country Club	0									
		Check No. 4	23.99											
	5	Check No. 5	29.73											
	6	Check No. 6	34.24											
	7		35.22	Turlock Fruit Company Inflow	0									
		Check No. 7	39.91											
	8		42.46	Oak Flat Water District-A	0									
			43.81	Oak Flat Water District-B	0									
			44.64	Oak Flat Water District-C	0									
		Check No. 8	45.97											
	9		46.18	Oak Flat Water District-D	0									
			Oak Flat Totals:	0	0						0	0	0	
	2B	9	Check No. 9	51.30										
10			Check No. 10	56.86										
11		Check No. 11	61.40											
12			66.14	Veteran's Cemetery	1	1								
		Check No. 12	66.71		8,340									

Table 12. South Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries												
	Beginning and Ending					Entitle- ment	Ext. M & I Cry. Ovr.	Local	Recre- ation									
	No.	Structure	Mile															
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	364			2										
			3.17	Granite - Vasco Rd. (Temp.)	0													
			3.18	Oakland Scavenger Zone 7	2													
		Check No. 1	3.91															
	2	Check No. 2	5.21															
2	3		7.21	Zone 7 Altamont	0							352						
		Check No. 3	9.49	Zone 7 Patterson Inflow Exchanged	352													
				Zone 7 Patterson Project Water	0													
4	4	Check No. 4	10.68													1		
	5	Check No. 5	12.29															
	6		13.55	Zone 7 Wente #1	0													
			14.16	Zone 7 Wente #2	0													
			Check No. 6	14.65														
		7		14.78	Zone 7 Arroyo Mocho													0
	Check No. 7		16.38															
				16.57	Zone 7 Wente #3													0
		16.69		Zone 7 Norman Nursery	0													
		16.70		Zone 7 Concannon Stored Exchange	0													
	5	8	Del Valle Branch Pipeline Junction	18.63	(Flow into Lake Del Valle)													0
			Deliveries through Del Valle Branch Pipeline		Arroyo Valle #1 & #2 Inflow Released	0												
					Arroyo Valle #1 & #2 Inflow Exchanged	0												
Lake Del Valle Recreation					0													
Zone 7 Wente #5					1													
6			19.20	So. Livermore Project	0													
			So. Livermore Inflow Released	842														
			So. Livermore Inflow Exchanged	0														
			19.21	Zone 7 - Kalthrof Detjens	2													
7		La Costa Tunnel	22.50	ACWD Vallecitos	0			413										
			25.97	City of San Francisco San Antonio	0													
8		Mission Tunnel	28.97	ACWD - Bayside 1 & 2 Project Water:	0													
				Inflow Released	413													
				Stored Released:	0													
9		Santa Clara Pipeline	35.86	S.C.V.W.D. Meter	0													

Table 13. Lake Del Valle

Daily Operation

(in acre-feet except as noted)

February 1998

Capacity: 77,106 ac-ft

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Arroyo Valle	South Bay Aqueduct	Outflow			Precipitation (inches)
				Natural 1/ 3/	From South Bay Aqueduct			Recreation Deliveries 2/	Evaporation	Total Outflow	
Jan 31	698.46	36,783									
1	698.74	36,971	188		0	0	78	0	2	80	0.13
2	701.90	39,141	2,170		0	0	90	0	1	91	0.48
3	716.18	49,956	10,815		0	0	61	0	2	63	2.38
4	715.27	49,214	-742		0	5,610	62	0	1	5,673	0.12
5	710.88	45,740	-3,474		0	4,907	73	0	1	4,981	0.16
6	711.53	46,244	504		0	145	77	0	3	225	0.51
7	717.92	51,395	5,151		0	579	30	0	0	609	0.36
8	720.76	53,805	2,410		0	3,961	30	0	0	3,991	0.89
9	718.33	51,738	-2,067		0	6,602	30	0	0	6,632	0.36
10	713.61	47,880	-3,858		0	2,758	30	0	2	2,790	0.14
11	710.71	45,918	-1,962		0	11,736	30	0	0	11,766	0.02
12	706.90	42,734	-3,184		0	0	30	0	1	31	0.23
13	703.22	40,070	-2,664		0	0	30	0	0	30	0.14
14	702.31	39,428	-642		0	2,164	30	0	0	2,194	0.26
15	703.35	40,162	734		0	0	30	0	0	30	0.56
16	702.85	39,808	-354		0	4,003	30	0	1	4,034	0.00
17	702.02	39,225	-583		0	0	46	0	0	46	0.20
18	701.08	38,571	-654		0	3,075	59	0	0	3,134	0.20
19	701.50	38,862	291		0	0	81	0	3	84	0.23
20	702.27	39,400	538		0	0	60	0	3	63	0.23
21	704.11	40,704	1,304		0	0	34	0	0	34	0.08
22	703.85	40,518	-186		0	4,662	35	0	1	4,698	0.88
23	702.41	39,498	-1,020		0	3,874	34	0	4	3,912	0.56
24	702.07	39,260	-238		0	0	30	0	3	33	0.00
25	701.48	38,848	-412		0	1,588	30	0	2	1,620	0.00
26	701.25	38,688	-160		0	0	50	0	2	52	0.00
27	700.98	38,501	-187		0	744	53	0	2	799	0.00
28	700.72	38,322	-179		0	0	64	0	5	69	0.00
Total			1,539	59,304	0	56,408	1,317	0	40	57,765	9.12

1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.

2/ To East Bay Regional Park District.

3/ Not available on a daily basis.

NR=No Records

Table 14. Consolidated State-Federal O'Neill Forebay

Daily Operations

February 1998

United States
Department of the Interior
Bureau of Reclamation Pump.
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Capacity: 56,430 Acre-feet

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
				Pump In 1/	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliveries 2/	
Jan 31	220.57	44,635										
1	219.97	43,074	-1,561	0	3,543	0	2,134	0	3,261	3,668	9	474
2	222.13	48,730	5,656	0	3,678	0	1,596	0	396	1,957	2	-67
3	223.33	51,928	3,198	505	3,555	0	0	0	3,007	415	0	974
4	222.33	49,261	-2,667	93	2,158	0	0	0	4,148	0	0	552
5	221.48	47,020	-2,241	28	2,787	0	0	0	2,962	1,378	0	395
6	221.97	48,308	1,288	32	2,952	0	0	0	1,939	661	0	265
7	222.88	50,726	2,418	103	3,204	0	0	0	2,292	636	0	840
8	222.46	49,607	-1,119	146	3,092	0	0	0	4,350	0	0	548
9	223.01	51,073	1,466	33	3,112	0	0	0	2,535	222	0	351
10	223.17	51,500	427	16	3,696	0	0	0	2,805	1,034	0	342
11	223.03	51,126	-374	9	3,569	0	0	0	3,386	751	0	370
12	221.71	47,625	-3,501	11	3,544	0	0	0	4,942	958	0	580
13	221.81	47,887	262	10	3,586	0	0	0	2,728	1,155	0	419
14	222.33	49,261	1,374	19	3,586	0	0	0	2,484	701	0	273
15	221.77	47,782	-1,479	18	3,630	0	0	0	4,458	452	0	516
16	222.03	48,464	682	19	3,565	0	0	0	2,602	890	0	252
17	222.77	50,433	1,969	21	3,763	0	79	0	2,573	556	0	259
18	222.42	49,501	-932	18	3,386	0	96	0	3,653	687	8	378
19	222.00	48,385	-1,116	17	3,564	0	87	0	3,649	976	0	394
20	221.93	48,203	-182	34	3,881	0	82	0	3,638	838	0	387
21	222.71	50,273	2,070	28	3,732	0	24	0	2,412	563	0	235
22	221.46	46,968	-3,305	36	3,440	0	59	0	5,090	734	0	623
23	222.37	49,368	2,400	34	3,431	0	48	0	2,510	0	5	212
24	221.42	46,863	-2,505	39	2,901	0	0	0	4,352	136	0	285
25	221.15	46,154	-709	28	1,291	0	0	0	1,290	504	0	118
26	220.29	43,905	-2,249	21	651	0	0	0	1,285	798	0	277
27	219.34	41,451	-2,454	18	689	0	0	0	1,283	874	5	218
28	218.76	39,976	-1,475	15	1,236	0	0	0	1,134	1,134	5	278
Total			-4,659	1,351	85,222	0	4,205	0	81,164	22,678	34	10,748
Mean cfs			- - -	48	3,044	0	150	0	2,899	810	1	384
ac-ft			-4,659	2,677	169,034	0	8,340	0	160,990	44,981	67	21,328

1/ Pump-in located at Mile 79.67R.

2/ Includes 0 AF delivered to DFG at O'Neill Forebay; does not include Parks and Recreation deliveries shown on Table 19a.

Total Parks and Recreation deliveries for the year are included in December's operation report.

Table 15. Consolidated State-Federal San Luis Reservoir

Daily Operations

February 1998

United States

State of California

Department of the Interior

The Resources Agency

Bureau of Reclamation

Department of Water Resources

Central Valley Project

Capacity: 2,027,835 ac-ft

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)	Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)	Evap. (in)	Prec. (in)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/	Sisk Dam Spill			
Jan 31	529.49	1,858,715								
1	530.05	1,865,623	6,908	3,261	0	175	0	397	0.06	0.02
2	530.28	1,868,463	2,840	396	0	184	0	1,220	0.04	0.98
3	531.26	1,880,580	12,117	3,007	0	182	0	3,284	0.35	2.55
4	531.90	1,888,508	7,928	4,148	0	109	0	-42	0.03	0.25
5	532.32	1,893,717	5,209	2,962	0	78	0	-258	0.06	0.06
6	532.67	1,898,061	4,344	1,939	0	83	0	334	0.09	0.27
7	533.22	1,904,896	6,835	2,292	0	132	0	1,286	0.13	0.44
8	533.95	1,913,979	9,083	4,350	0	149	0	378	0.10	1.00
9	534.33	1,918,714	4,735	2,535	0	151	0	3	0.00	0.16
10	534.74	1,923,827	5,113	2,805	0	112	0	-115	0.07	0.00
11	535.20	1,929,569	5,742	3,386	0	109	0	-382	0.00	0.17
12	535.95	1,938,944	9,375	4,942	0	108	0	-108	0.04	0.04
13	536.34	1,943,825	4,881	2,728	0	115	0	-152	0.02	0.39
14	536.82	1,949,838	6,013	2,484	0	104	0	652	0.07	0.44
15	537.46	1,957,866	8,028	4,458	0	100	0	-311	0.06	0.17
16	537.89	1,963,266	5,400	2,602	0	114	0	234	0.11	0.00
17	538.25	1,967,791	4,525	2,573	0	123	0	-169	0.01	0.50
18	538.77	1,974,334	6,543	3,653	0	120	0	-234	0.03	0.11
19	539.37	1,981,893	7,559	3,649	0	130	0	292	0.09	0.01
20	539.86	1,988,073	6,180	3,638	0	113	0	-409	0.07	0.46
21	540.36	1,994,386	6,313	2,412	0	110	0	881	0.07	0.00
22	541.12	2,003,996	9,610	5,090	0	123	0	-122	0.00	0.72
23	541.54	2,009,313	5,317	2,510	0	132	0	303	0.09	0.11
24	542.16	2,017,171	7,858	4,352	0	133	0	-257	0.13	0.16
25	542.32	2,019,201	2,030	1,290	0	121	0	-146	0.10	0.00
26	542.50	2,021,486	2,285	1,285	0	112	0	-21	0.10	0.01
27	542.67	2,023,644	2,158	1,283	0	20	0	-175	0.13	0.01
28	542.82	2,025,549	1,905	1,134	0	20	0	-154	0.07	0.00
Total			166,834	81,164	0	3,262	0	6,209	2.12	9.03
Mean cfs			---	2,899	0	117	0	222	---	---
ac-ft			166,834	160,990	0	6,470	0	12,314	---	---

1/ Pacheco Tunnel, San Felipe Split; Santa Clara: 6,464 AF, San Benito: 6 AF.

Table 16. San Luis Field Division Plant Data

(in acre-feet)

February 1998

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/, 2/	Total Generation	SWP Generation 1/, 2/	Total Pumping	SWP Pumping 1/, 2/	Federal
1	7,275	3,608	0	0	6,468	36	347
2	3,882	1,172	0	0	785	-14	365
3	823	823	0	0	5,964	-141	361
4	0	0	0	0	8,228	95	216
5	2,733	1,279	0	0	5,875	-26	155
6	1,311	557	0	0	3,846	-8	165
7	1,262	613	0	0	4,546	4	262
8	0	0	0	0	8,628	22	296
9	440	268	0	0	5,028	4	300
10	2,051	1,194	0	0	5,564	30	222
11	1,490	684	0	0	6,716	65	216
12	1,900	1,051	0	0	9,802	-63	214
13	2,291	1,480	0	0	5,411	-60	228
14	1,390	627	0	0	4,927	-36	206
15	897	125	0	0	8,842	-79	198
16	1,765	825	0	0	5,161	-34	226
17	1,103	77	0	0	5,104	-22	244
18	1,363	327	0	0	7,246	40	238
19	1,936	902	0	0	7,238	46	258
20	1,662	639	0	0	7,216	42	224
21	1,117	93	0	0	4,784	-16	218
22	1,456	381	0	0	10,096	36	244
23	0	0	0	0	4,979	-4	262
24	270	34	0	0	8,632	28	264
25	1,000	171	0	0	2,559	-24	240
26	1,583	730	0	0	2,549	-30	222
27	1,733	926	0	0	2,545	-12	40
28	2,248	1,388	0	0	2,249	-14	40
Total	44,981	19,976	0	0	160,990	-135	6,470

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

2/ Provisional, subject to change.

Table 17. Consolidated State-Federal Los Banos Reservoir

Daily Operations

February 1998

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

Capacity: 34,560 ac-ft

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)	Evap. (in)	Prec. (in)
					Spill	Outlet			
Jan 31	326.45	19,947							
1	326.72	20,072	125	263	0	200	0	0.03	0.15
2	331.13	22,171	2,099	1,241	0	183	0	0.11	0.91
3	348.48	31,524	9,353	5,409	0	694	1	0.52	1.92
4	347.38	30,882	-642	576	0	900	1	0.05	0.03
5	344.96	29,487	-1,395	237	0	940	-1	0.05	0.11
6	344.11	29,006	-481	757	0	1,000	1	0.06	0.30
7	345.96	30,059	1,053	1,531	0	1,000	0	0.09	0.04
8	347.67	31,051	992	1,178	0	678	0	0.17	0.75
9	345.92	30,036	-1,015	488	0	1,000	1	0.06	0.57
10	343.31	28,556	-1,480	254	0	1,000	0	0.04	0.00
11	340.41	26,958	-1,598	194	0	1,000	1	0.03	0.18
12	337.76	25,540	-1,418	285	0	1,000	0	0.08	0.04
13	335.00	24,107	-1,433	228	0	950	-1	0.00	0.44
14	337.44	25,371	1,264	1,161	0	524	1	0.09	0.32
15	337.54	25,424	53	586	0	559	-1	0.02	0.17
16	336.92	25,099	-325	419	0	583	0	0.24	0.00
17	337.17	25,230	131	616	0	550	0	0.03	0.72
18	336.39	24,823	-407	278	0	483	0	0.07	0.13
19	337.19	25,240	417	677	0	467	0	0.08	0.02
20	336.59	24,927	-313	492	0	650	0	0.10	0.49
21	336.91	25,094	167	734	0	650	0	0.11	0.00
22	337.09	25,188	94	697	0	650	1	0.06	0.60
23	337.48	25,392	204	753	0	650	0	0.08	0.08
24	336.89	25,083	-309	411	0	567	0	0.13	0.11
25	336.22	24,735	-348	275	0	450	-1	0.15	0.00
26	335.31	24,265	-470	213	0	450	0	0.12	0.02
27	334.26	23,730	-535	180	0	450	1	0.11	0.00
28	333.06	23,126	-604	145	0	450	1	0.13	0.00
Total			3,179	20,278	0	18,678	5	2.81	8.10
Mean cfs-days			---	724	0	667	---	---	---
Acre-feet			3,179	40,221	0	37,048	5	---	---

Table 18. Consolidated State-Federal Little Panoche Reservoir

Daily Operations

February 1998

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

Capacity: 5,580 ac-ft

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Computed Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Jan 31	602.77	837					
1	602.70	832	-5	1	0	4	1
2	604.20	925	93	350	0	303	0
3	624.00	2,852	1,927	1,572	0	600	-1
4	614.90	1,815	-1,037	0	0	500	-46
5	609.58	1,325	-490	0	0	248	2
6	605.50	1,013	-312	0	0	120	-75
7	608.85	1,264	251	332	0	205	-1
8	606.90	1,112	-152	143	0	220	1
9	606.10	1,052	-60	105	0	135	0
10	605.40	1,006	-46	87	0	110	0
11	605.00	978	-28	66	0	80	0
12	604.80	965	-13	53	0	60	1
13	605.00	978	13	77	0	70	-1
14	604.80	975	-3	58	0	60	1
15	606.60	1,089	114	154	0	97	1
16	605.95	1,044	-45	86	0	109	1
17	605.90	1,041	-3	88	0	90	1
18	605.30	999	-42	54	0	75	0
19	604.65	955	-44	43	0	65	0
20	607.30	1,142	187	244	0	150	1
21	606.40	1,074	-68	56	0	90	-1
22	606.70	1,173	99	150	0	100	-1
23	606.30	1,067	-106	32	0	85	-1
24	607.10	1,127	60	150	0	120	0
25	606.50	1,082	-45	67	0	90	1
26	606.00	1,045	-37	61	0	80	1
27	605.40	1,006	-39	30	0	50	1
28	605.40	1,006	0	50	0	50	0
Total			169	4,109	0	3,966	- - -
Mean cfs			- - -	147	0	142	- - -
ac-ft			169	8,150	0	7,867	-114

Table 19a. Governor Edmund G. Brown California Aqueduct

San Luis Field Division, Monthly Deliveries

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries			
	Beginning and Ending					USBR	Transfer	DWR Recreation	USBR Recreation
	No.	Structure	Mile						
2B	12	Check No. 12	66.71		8,340				
3	13	O'Neill Forebay		Department of Parks and Recreation	2			1	1
		Outlet Check No. 13	70.85	Department of Fish & Game	0			0	0
			70.91 Thru 85.08	San Luis Water District	67	67			
				Reach 3 Subtotal:	69	67	0	1	1
		Dos Amigos Pumping Plant	86.73		44,982				
4	14		89.03 Thru 94.06	San Luis Water District	458	458			
			89.66 Thru 89.67	Pacheco Water District	1	1			
			89.68	Panoche Water District	3	3			
			89.70	City of Dos Palos	56	56			
		Check No. 14	95.06						
	15		98.15 Thru 104.20	San Luis Water District	218	218			
			96.15 Thru 102.64	Panoche Water District	801	801			
			102.64	Broadview Water District	1	1			
			105.22 Thru 108.64	Westlands Water District	1,285	1,285			
		Check No.15	108.50						
				Pacheco Water District Total:	1	1	0	0	0
				Broadview Water District Total:	1	1	0	0	0
				City of Dos Palos Total:	56	56	0	0	0
				SLWD Reach 4 Subtotal:	676	676	0	0	0
				Panoche Water District Total:	804	804	0	0	0
				SLWD Total:	743	743	0	0	0
				Westlands WD Reach 4 Subtotal:	1,285	1,285	0	0	0

Table 19b. Governor Edmund G. Brown California Aqueduct

San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries			
	Beginning and Ending					USBR	Transfer	DWR Recreation	USBR Recreation
	No.	Structure	Mile						
5	16		110.52 Thru 122.05	Westlands Water District Department of Fish and Game	5,326 0	5,326			
		Check No. 16	122.07						
	17		124.18 Thru 132.74	Westlands Water District	5,916	5,916			
		Check No. 17	132.95						
	18		133.81 Thru 142.61	Westlands Water District	3,309	3,309			
		Pleasant Valley Pumping Plant	143.16	Westlands Water District	2,516				
			143.16	City of Coalinga	187				
		Check No. 18	143.23						
				Westlands WD Reach 5 Subtotal:	17,067	17,067	0	0	0
	6	19		145.26 Thru 151.19	Westlands Water District	8,541	8,541		
Check No. 19			155.64						
				Westlands WD Reach 6 Subtotal:	8,541	8,541	0	0	0
7	20		156.34	City of Huron	39	39			
			156.40 Thru 163.69	Westlands Water District	4,662				
		Check No. 20	164.69						
	21		164.79	City of Avenal	158	158			
			167.04 Thru 171.67	Westlands Water District	915				
		Check No. 21	172.40		31,331				
			Reach 7 Total:	5,774	5,774	0	0	0	
			Westlands WD Total:	32,470	32,470	0	0	0	
			City of Coalinga Total:	187	187	0	0	0	
			City of Huron Total:	39	39	0	0	0	
			City of Avenal Total:	158	158	0	0	0	
			Phase I Water Total:	0	0	0	0	0	
Total San Luis Field Division Deliveries:					34,461	34,459	0	1	1

Table 20. Consolidated State-Federal San Luis Canal 1/

Daily Operations
February 1998

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)	Evap. (in)	Prec. (in)
			Non- Project 2/	Dos Amigos Pumping Plant	SLWD 3/	PWD	WWD 4/	SJFD			
Jan 31	27,835										
1	27,673	-162	0	3,668	48	47	1,251	2,220	-184	0.06	0.02
2	27,031	-642	17	1,957	45	47	1,238	1,445	477	0.04	0.98
3	26,891	-140	1,598	415	10	16	901	791	-366	0.35	2.55
4	26,093	-798	552	0	6	7	602	434	95	0.03	0.25
5	26,315	222	188	1,378	7	0	696	1,066	315	0.06	0.06
6	25,307	-1,008	324	661	0	0	673	893	73	0.09	0.27
7	25,743	436	649	636	0	0	560	685	180	0.13	0.44
8	25,453	-290	1,211	0	0	0	515	1,103	261	0.10	1.00
9	24,892	-561	429	222	0	0	582	736	384	0.00	0.16
10	25,078	186	185	1,034	6	0	475	672	28	0.07	0.00
11	24,851	-227	145	751	9	0	471	570	40	0.00	0.17
12	24,906	55	122	958	10	0	483	526	-33	0.04	0.04
13	26,453	1,547	103	1,155	9	4	402	793	730	0.02	0.39
14	24,828	-1,625	134	701	10	2	461	558	-623	0.07	0.44
15	24,756	-72	187	452	8	4	439	188	-36	0.06	0.17
16	25,166	410	129	890	10	2	383	271	-146	0.11	0.00
17	25,063	-103	175	556	10	5	445	351	28	0.01	0.50
18	24,813	-250	118	687	10	5	447	350	-119	0.03	0.11
19	25,131	318	108	976	18	19	521	319	-47	0.09	0.01
20	25,423	292	184	838	16	12	534	215	-98	0.07	0.46
21	26,774	1,351	219	563	18	12	503	120	552	0.07	0.00
22	26,135	-639	371	734	12	19	526	140	-730	0.00	0.72
23	27,147	1,012	340	0	15	27	474	154	840	0.09	0.11
24	26,347	-800	219	136	18	22	479	279	40	0.13	0.16
25	24,865	-1,482	107	504	15	28	458	104	-753	0.10	0.00
26	26,166	1,301	69	798	12	26	599	176	602	0.10	0.01
27	26,291	125	43	874	15	29	656	289	135	0.13	0.01
28	26,482	191	33	1,134	33	72	790	349	173	0.07	0.00
Total		-1,353	7,959	22,678	370	405	16,564	15,797	1,817	2.12	9.03
Mean (cfs)		- - -	284	810	13	14	592	564	65	- - -	- - -
Acre-feet		-1,353	15,788	44,981	733	804	32,855	31,331	3,601	- - -	- - -

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Pump In of Non-Project Water and Flood Water (15,788 AF) is included in the gain or loss on a daily basis.

3/ Includes 0 AF AG & 1 AF M&I to Pacheco W.D. and 56 AF to the City of Dos Palos.

4/ Includes 39 AF to the City of Huron, 158 AF to the City of Avenal, 187 AF to the City of Coalinga, 0 AF Phase I Water, and 1 AF to Broadview W.D.

Table 21. San Joaquin Field Division Plant Data

(in acre-feet)

February 1998

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	315	322	46	42	50	972	837	833	817
2	104	112	21	19	23	894	775	781	755
3	19	19	19	19	21	882	725	687	750
4	59	67	50	45	50	677	650	682	698
5	48	54	48	45	47	735	748	786	764
6	41	44	42	38	45	787	781	786	764
7	44	49	46	41	46	735	770	745	764
8	79	82	46	42	48	1,260	1,360	1,250	1,309
9	27	30	36	33	36	686	551	609	532
10	39	51	38	35	41	525	568	510	545
11	25	25	17	16	19	106	0	0	0
12	57	57	45	42	47	132	0	0	0
13	30	36	46	41	48	185	52	51	0
14	52	64	46	41	48	132	0	0	55
15	37	36	23	21	24	106	0	0	0
16	53	53	46	40	47	103	0	28	52
17	30	44	46	42	49	212	0	0	0
18	85	85	44	41	46	265	116	51	55
19	42	59	22	21	23	318	179	156	163
20	60	60	46	42	49	159	0	20	27
21	85	85	40	38	40	0	0	0	0
22	17	31	22	21	24	106	73	68	0
23	77	77	44	41	47	106	0	0	0
24	11	9	26	20	27	0	0	0	0
25	70	70	45	41	48	0	0	0	0
26	32	30	23	21	23	0	0	0	0
27	59	62	53	42	47	212	90	74	0
28	46	51	46	42	47	132	0	0	0
Total	1,643	1,764	1,072	972	1,110	10,427	8,275	8,117	8,050

Table 22a. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries				
	Beginning and Ending					Entitle- ment	Inter- ruptible Ent.	MWD Ent. Exch. 1/	Exchange 2/	MWD Ent.
	No.	Structure	Mile							
7	21	Check No. 21	172.40		31,331	2	142			
8C	22		172.66	Empire West Side Irrig. Dist. TL - A	0					
				County of Kings TL - A	0					
				TLBWSD TL-A	142					
8D			175.18	DRWD - 1	0					
			180.64	TLBWSD - C	0					
			180.65	DRWD - SD	0					
			182.99	Dudley Ridge Water Dist. DRWD - 2	2					
				183.00	TLB WSD TL - B					
31A			184.63	Coastal Branch	1,643					
8D				184.78	Dudley Ridge Water Dist. DRWD - 3					
		Dudley Ridge Reach 8D Total:		4						
		Tulare Lake Basin WSD Total:		11						
	Check No. 22	184.82								
9	23		189.69	Kern County Water Agency Lost Hills Water Dist. - 1	41					
			191.18	Kern County Water Agency Lost Hills Water Dist. - 2	53					
			194.22	Kern County Water Agency Lost Hills Water Dist. - 3	58					
			196.40	Kern County Water Agency Berrenda Mesa - 2	0					
			196.75	Kern County Water Agency Lost Hills Water Dist. - 4	138					
				K.C.W.A. Reach 9 Subtotal:	290					
		Check No. 23	197.05							
10A	24		201.24	Kern County Water Agency Lost Hills Water Dist. - 7	32					
			202.05	Kern County Water Agency Lost Hills Water Dist. - 5	97					
			204.69	Kern County Water Agency Lost Hills Water Dist. - 6	0					
			205.26	Kern County Water Agency Lost Hills Water Dist. - 8	0					
				Check No. 24	207.94					
	25		209.71	Kern County Water Agency Belridge Water Storage Dist. - 1A	5					
			209.78	Kern National Wildlife Refuge USBR BV-1B	0					
				Kern County Water Agency Buena Vista WSD 1B	294					
			209.80	KCWA Semitropic WSD	269					
				KCWA Semitropic WSD Penstocks	5,389					
				USBR Total:	0					
				K.C.W.A. Reach 10A Subtotal:	6,086					

1/ Return of USBR water in exchange for MWD 1997 Entitlement stored by Semitropic WSD.

2/ WWD water delivered to KCWA in accordance to agreement dated 4-6-98.

Table 22b. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

February 1998

Reach No.	Operating Pool Beginning and Ending			Turnout	Total Diver- sions	Deliveries									
	No.	Structure	Mile			Entitle- ment	Inter- ruptible Ent.	MWD Ent. Exch. 2/	Exchange 3/	MWD Ent.					
11B	25		210.75	Kern County Water Agency Belridge - 2	0	88									
			214.11	Kern County Water Agency Belridge - 3	0										
			216.62	Kern County Water Agency Belridge - 4	0										
			217.13	Kern County Water Agency Belridge - 5	88										
				Kern County Water Agency Belridge - 5D	78										
			Check No. 25	217.79											
				K.C.W.A. Reach 11B Subtotal:	166	166	0	0	0	0					
12D	26		219.58	Kern County Water Agency Belridge - 6	0										
			Check No. 26	224.92											
12E	27		230.37	Kern County Water Agency Buena Vista - 6	2,161	3,314 573			2,161						
			Check No. 27	231.73											
	28		235.75	Kern County Water Agency Buena Vista - 2	4,960									4,960	336
			238.04	Kern County WA CVC	3,650										
				DRWD CVC	573										
				Tulare Co.	0										
				Lower Tule River	0										
				Fresno Co.	0										
				Pixley ID	0										
				Hacienda DWR Wells	0										
	Check No. 28	238.11													
				1/ Arvin Edison Total:	0						0	0	0	0	
			Reach 12E Subtotal:	11,344	0	3,887	0	7,121	336						
13B	29		241.02	Kern River Intertie (inflow)	0				2,352						
			242.85	KCWA Buena Vista WSD - 7	2,352										
				KCWA Buena Vista WSD - 5	0										
			243.09	Kern County Water Agency Buena Vista - 3	541										
	Check No. 29	244.54	Buena Vista WSD	0									541		
	30		249.85	Kern County Water Agency Buena Vista - 4											0
			Buena Vista Pumping Plant	250.99											10,427
				K.C.W.A. Reach 13B Subtotal:											2,893
14A	31		254.47	Kern County Water Agency West Kern - 2	0										
			256.11	Kern County Water Agency Wheeler Ridge-Maricopa - 2	3									3	

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

2/ Return of USBR water in exchange for MWD 1997 Entitlement stored by Semitropic WSD.

3/ WWD water delivered to KCWA in accordance to agreement dated 4-6-98.

Table 22c. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries				
	Beginning and Ending					Entitle- ment	Inter- ruptible Ent.	MWD Ent. Exch. 1/	Exchange 2/	MWD Ent.
	No.	Structure	Mile							
14A	31	Check No. 31	256.14							
	32		258.61	Kern County Water Agency Wheeler Ridge-Maricopa - 3	6				6	
			260.44	Kern County Water Agency Wheeler Ridge-Maricopa - 4	71				71	
			Check No. 32	261.72						
				KCWA Reach 14A Subtotal:	80	0	0	0	80	0
14B	33		264.42	Kern County Water Agency Wheeler Ridge-Maricopa - 5	731				731	
			266.91	Kern County Water Agency Wheeler Ridge-Maricopa - 6	26				26	
			Check No. 33	267.36						
	34		270.24	Kern County Water Agency Wheeler Ridge-Maricopa - 7	978				978	
			Check No. 34	271.27						
				Reach 14B Total:	1,735	0	0	0	1,735	0
14C	35		272.39	Kern County Water Agency Wheeler Ridge-Maricopa - 8	338				338	
			276.09	Kern County Water Agency Wheeler Ridge-Maricopa - 9	155				155	
				Reach 14C Total:	493	0	0	0	493	0
			Teerink Pumping Plant	278.13		8,275				
15A	36		279.02	Kern County Water Agency Wheeler Ridge-Maricopa - 9A	7				7	
			280.06	Kern County Water Agency Wheeler Ridge-Maricopa - 10	41				41	
				Reach 15-A Total:	48	0	0	0	48	0
			Chrisman Pumping Plant	280.36		8,117				
16A	37		282.06	Kern County Water Agency Wheeler Ridge-Maricopa - 11	0	6				
			Check No. 37	283.95						
	38		285.01	Kern County Water Agency Wheeler Ridge-Maricopa - 12	0					
			286.39	Kern County Water Agency Wheeler Ridge-Maricopa - 13A	0					
			287.06	Kern County Water Agency Wheeler Ridge-Maricopa - 13	0					
			Check No. 38	287.09						
	39		287.62	Kern County Water Agency Wheeler Ridge-Maricopa - 13B	6					
			Check No. 39	290.21						
	40		291.26	Kern County Water Agency Wheeler Ridge-Maricopa - 14	20					
			293.07	Kern County Water Agency Wheeler Ridge-Maricopa - 15	0					
KCWA TC-15			381	42	313		26			
K.C.W.A. Reach 16A Subtotal:			407	68	313	0	26	0		
17E		Edmonston Pumping Plant	293.45		8,050					

1/ Return of USBR water in exchange for MWD 1997 Entitlement stored by Semitropic WSD.

2/ WWD water delivered to KCWA in accordance to agreement dated 4-6-98.

Table 23. Governor Edmund G. Brown California Aqueduct

San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries					
	Beginning and Ending					Entitle- ment	Inter- ruptible Ent.	MWD Ent.	Exchange 1/ 2/	MWD Ent. Exch.	
	No.	Structure	Mile								
31A	C-1	Coastal Branch Control	0.02		1,643	40					
		Las Perillas Pumping Plant	1.16		1,643						
	C-2		3.79	Green Valley Water District	0						
		Badger Hill Pumping Plant	4.27		1,764						
	C-3	Coastal Check No. 3	7.21								
	C-4		9.34	Castaic Lake WA (Devil's Den WD #1)	0						
		Coastal Check No. 4	9.34								
	C-5	Coastal Check No. 5	12.20								
	C-6		13.30	Kern County Water Agency Berrenda Mesa - 3	40						
			14.83	Kern County Water Agency Berrenda Mesa - DD	0						
				Kern County Water Agency Berrenda Mesa - PO	502						
			Devil's Den Pumping Plant	14.86							1,072
				K.C.W.A. Reach 31A Subtotal:	542	542	0	0	0	0	
				3/ K.C.W.A. Total:	24,084	1,011	4,397	436	12,690	5,550	
33A	C-7	Bluestone Pumping Plant	19.05		972	859					
	C-8	Polonio Pass Pumping Plant	26.54		1,110						
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant							
33B	C-10	Shandon T.O.	38.23	Santa Barbara County (CCWA)	859	263					
		Tank Site 2	58.63	Central Coast:	0						
	C-11	Chorro Valley T.O.	69.31	San Luis Obispo County (CCWA)	263						
		Energy Dissipater	78.12								
34	C-12	Lopez T.O.	85.86	SLOCFC & WCD	0	1,122	0	0	0	0	
				CCWA Total:	1,122						
			Guadalupe T.O.	102.70	SBCFC & WCD	0					
			Santa Maria T.O.	107.43	SBCFC & WCD	0					
			So. Cal. Water T.O.	109.20	SBCFC & WCD	0					
					SBCFC & WCD Total:	0	0	0	0	0	0
38			Tank Site 5	115.42							

1/ WWD water delivered to KCWA in accordance to agreement dated 4-6-98.

2/ Return of USBR water in exchange for MWD 1997 Entitlement stored by Semitropic WSD.

3/ Includes 573 AF of Dudley Ridge WD Interruptable water delivered to the Kern Water bank.

Table 24. Southern Field Division Plant Data

(in acre-feet)

February 1998

Date	West Branch				East Branch						
	Oso Pumping Plant	Warne Powerplant Generation	Castaic Powerplant		Alamo Powerplant			Pearblossom Pumping Plant	Mojave Siphon Powerplant		Devil Canyon Powerplant Generation
			Generation	Pumpback	Generation	Bypass Through Plant	Cottonwood Chute		Generation	Bypass Flume	
1	776	0	841	1,265	0	0	0	0	0	0	256
2	781	968	4,054	0	0	0	37	0	0	0	241
3	884	932	4,909	1,047	0	0	24	0	0	0	208
4	713	884	1,834	2,592	0	0	0	0	0	0	250
5	722	831	2,460	203	0	0	0	12	43	0	244
6	746	919	490	2,710	0	0	22	0	20	0	259
7	757	765	878	0	0	0	0	0	12	0	246
8	1,338	757	1,762	245	0	0	0	68	11	0	227
9	577	757	3,682	555	0	0	0	69	37	0	248
10	511	634	1,748	1,995	0	0	0	58	49	0	282
11	0	0	1,843	1,651	0	0	0	35	41	0	279
12	0	0	2,085	998	0	0	0	46	1	0	468
13	0	0	3,213	2,528	0	0	0	58	0	0	222
14	67	0	789	1,490	0	0	0	49	12	0	241
15	0	0	1,020	2,714	0	0	39	60	12	0	213
16	71	0	2,843	2,322	0	0	0	6	25	0	418
17	0	0	4,323	0	0	0	0	0	0	0	401
18	0	0	1,738	943	0	0	4	0	23	0	373
19	114	0	3,115	1,146	0	0	18	0	9	0	378
20	0	0	2,880	1,043	0	0	0	0	9	0	378
21	0	0	1,579	3,849	0	0	8	0	9	0	342
22	0	0	925	4,105	0	0	0	0	9	0	367
23	0	0	8,212	876	0	0	0	0	8	0	330
24	0	0	2,722	24	0	0	0	0	0	0	386
25	0	0	1,804	1,049	0	0	0	0	8	0	336
26	0	0	1,042	211	0	0	8	0	8	0	338
27	0	0	342	0	0	0	0	0	8	0	361
28	50	0	409	318	0	0	0	0	13	0	359
Total	8,107	7,447	63,542	35,879	0	0	160	461	367	0	8,651

Table 25. Pyramid Lake
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Jan 31	2576.12	167,485								
1	2576.61	168,113	628	1,265	0	67	841	0	20	157
2	2574.88	165,904	-2,209	0	968	1,387	4,054	0	1,686	1,176
3	2574.26	165,118	-786	1,047	932	7,470	4,909	0	4,364	-962
4	2575.66	166,898	1,780	2,592	884	1,171	1,834	0	1,000	-33
5	2574.28	165,143	-1,755	203	831	620	2,460	0	1,000	51
6	2577.34	169,051	3,908	2,710	919	1,723	490	0	1,488	534
7	2577.97	169,863	812	0	765	2,591	878	0	5,068	3,402
8	2575.00	166,057	-3,806	245	757	3,855	1,762	0	5,496	-1,405
9	2572.08	162,371	-3,686	555	757	1,138	3,682	0	2,876	422
10	2571.77	161,983	-388	1,995	634	871	1,748	0	2,182	42
11	2571.73	161,933	-50	1,651	0	740	1,843	0	50	-548
12	2571.61	161,783	-150	998	0	662	2,085	0	50	325
13	2571.47	161,608	-175	2,528	0	586	3,213	0	50	-26
14	2573.13	163,690	2,082	1,490	0	948	789	0	50	483
15	2575.46	166,643	2,953	2,714	0	1,082	1,020	0	50	227
16	2575.71	166,961	318	2,322	0	687	2,843	0	50	202
17	2572.83	163,312	-3,649	0	0	661	4,323	0	50	63
18	2572.75	163,212	-100	943	0	579	1,738	0	50	166
19	2571.58	161,745	-1,467	1,146	0	569	3,115	0	50	-17
20	2570.49	160,386	-1,359	1,043	0	561	2,880	0	50	-33
21	2572.84	163,325	2,939	3,849	0	499	1,579	0	50	220
22	2576.71	168,241	4,916	4,105	0	1,428	925	0	50	358
23	2575.11	166,197	-2,044	876	0	26,752	8,212	0	11,890	-9,570
24	2575.17	166,273	76	24	0	4,479	2,722	0	4,377	2,672
25	2576.15	167,524	1,251	1,049	0	1,736	1,804	0	50	320
26	2576.50	167,972	448	211	0	1,269	1,042	0	400	410
27	2576.76	168,305	333	0	0	1,042	342	0	395	28
28	2577.13	168,780	475	318	0	937	409	0	395	24
Total			1,295	35,879	7,447	66,110	63,542	0	43,287	-1,312

Table 26. Elderberry Forebay

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jan 31	1508.92	18,772							0
1	1507.68	18,303	-469	841	12	1,265	12	0	-45
2	1519.63	23,083	4,780	4,054	436	0	436	0	726
3	1522.17	24,173	1,090	4,909	2,273	1,047	2,273	1,401	-1,371
4	1514.69	21,035	-3,138	1,834	502	2,592	502	2,204	-176
5	1520.66	23,523	2,488	2,460	337	203	337	0	231
6	1510.01	19,188	-4,335	490	959	2,710	959	2,552	437
7	1513.46	20,540	1,352	878	1,450	0	1,450	363	837
8	1512.77	20,216	-324	1,762	2,492	245	2,492	960	-881
9	1521.37	23,828	3,612	3,682	588	555	588	0	485
10	1516.17	21,638	-2,190	1,748	362	1,995	362	1,148	-795
11	1513.68	20,628	-1,010	1,843	248	1,651	248	0	-1,202
12	1516.34	21,708	1,080	2,085	188	998	188	0	-7
13	1518.18	22,471	763	3,213	157	2,528	157	0	78
14	1517.07	22,009	-462	789	555	1,490	555	0	239
15	1513.25	20,457	-1,552	1,020	264	2,714	264	0	142
16	1511.38	19,719	-738	2,843	195	2,322	195	168	-1,091
17	1513.56	20,580	861	4,323	288	0	288	3,685	223
18	1513.10	20,397	-183	1,738	213	943	213	960	-18
19	1518.56	22,631	2,234	3,115	215	1,146	215	0	265
20	1523.40	24,710	2,079	2,880	371	1,043	371	0	242
21	1518.69	22,686	-2,024	1,579	197	3,849	197	0	246
22	1512.75	20,259	-2,427	925	450	4,105	450	0	753
23	1531.69	28,469	8,210	8,212	7,348	876	7,348	0	874
24	1527.70	26,627	-1,842	2,722	2,085	24	2,085	2,014	-2,526
25	1522.49	24,313	-2,314	1,804	816	1,049	816	3,783	714
26	1520.53	23,467	-846	1,042	715	211	715	1,560	-117
27	1518.90	22,774	-693	342	563	0	563	964	-71
28	1517.35	22,125	-649	409	459	318	459	769	29
Total			3,353	63,542	24,738	35,879	24,738	22,531	-1,779

Table 27. Castaic Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow		Computed Losses (-) Gains (+)
				From Elderberry Forebay		Natural	Deliveries	Released To Castaic Lagoon	
				Natural	Project				
Jan 31	1497.85	286,691							
1	1497.55	286,067	-624	12	0	15	683	30	62
2	1497.35	285,652	-415	436	0	298	643	149	-357
3	1498.55	288,150	2,498	2,273	1,401	819	595	3,372	1,972
4	1499.27	289,655	1,505	502	2,204	259	605	674	-181
5	1499.06	289,216	-439	337	0	85	620	397	156
6	1500.48	292,195	2,979	959	2,552	424	587	197	-172
7	1501.28	293,882	1,687	1,450	363	874	686	793	479
8	1502.74	296,974	3,092	2,492	960	1,081	713	198	-530
9	1502.44	296,337	-637	588	0	364	847	198	-544
10	1502.94	297,399	1,062	362	1,148	236	920	198	434
11	1503.34	298,251	852	248	0	162	765	198	1,405
12	1502.94	297,399	-852	188	0	114	631	198	-325
13	1502.74	296,974	-425	157	0	94	538	99	-39
14	1502.64	296,762	-212	555	0	274	493	0	-548
15	1502.64	296,762	0	264	0	190	363	0	-91
16	1503.04	297,612	850	195	168	129	253	0	611
17	1504.88	301,542	3,930	288	3,685	188	370	0	139
18	1505.38	302,615	1,073	213	960	156	570	0	314
19	1505.28	302,400	-215	215	0	143	269	0	-304
20	1505.18	302,185	-215	371	0	212	402	0	-396
21	1505.18	302,185	0	197	0	152	331	0	-18
22	1505.38	302,615	430	450	0	702	311	0	-411
23	1508.55	309,470	6,855	7,348	0	7,462	317	6,298	-1,340
24	1511.15	315,161	5,691	2,085	2,014	1,995	308	3,336	3,241
25	1513.05	319,358	4,197	816	3,783	981	238	1,716	571
26	1513.25	319,801	443	715	1,560	632	127	417	-1,920
27	1513.25	319,801	0	563	964	471	357	664	-977
28	1512.85	318,914	-887	459	769	402	220	646	-1,651
Total			32,223	24,738	22,531	18,914	13,762	19,778	-420

Table 28. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries				
	Beginning and Ending					Entitle- ment	Rec.	Local	Ext. M & I Cry. Ovr. 2/	CLWA T1
	No.	Structure	Mile							
29A	42	Oso Pumping Plant	1.49		8,107	6,610 6,507 641	4	0	0	520 -520
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency	Re- moved					
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency	Stub					
29G		Warne Power Plant	14.07		7,447					
29H	W3	Pyramid Lake		Calif. State Park Pyramid Recreation	0					
		Pyramid Dam	17.10	Piru Creek Fish Enhancement	0					
29J	W4	Castaic Power Plant	25.82	(35,879 AF pumpback)	63,542					
		Elderberry Forebay								
		Forebay Dam	28.12							
30 1/	W5	Castaic Lake		Calif. State Park Castaic Lake Recreation	4					
		Castaic Dam	31.47							
		Castaic Lake Outlet	31.55	MWD - 78"	6,610					
				MWD - 132"	7,027					
				CLWA - T1	-520					
				Castaic Lake Water Agency	641					
				United Water Conservation Dist.	0					
				Ventura County FCD	Stub					
				LA Co. Parks & Recreation	0					
				Releases to Lagoon	19,778					
		Reach 30 Subtotal:	13,762							
	W6	Castaic Lagoon		Recreation to Lagoon	24					
		Castaic Lagoon Outlet	31.87		19,573					

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

Table 29. Silverwood Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

February 1998

Date	Water Surface Elev. (in feet)	Storage	Storage Change	Inflow			Outflow					Computed Losses (-) Gains (+)	Las Flores Ranch Exchange 1/
				Project		Natural Stream Flow	Project			Del. To Mojave W.A.	Natural To Mojave River		
				Mojave Siphon Power-Plant	Mojave Bypass Flume		Delivered to CLAWA	Rec.	San Bernardino Tunnel				
Jan 31	3350.15	70,319											
1	3349.81	69,998	-321	0	0	20	0	0	256	0	0	-85	20
2	3349.74	69,932	-66	0	0	18	0	0	241	0	0	157	20
3	3349.89	70,073	141	0	0	121	3	0	208	0	0	231	31
4	3349.68	69,876	-197	43	0	124	3	0	250	0	40	-71	36
5	3349.43	69,641	-235	20	0	72	2	0	244	0	0	-81	20
6	3350.19	70,355	714	12	0	575	3	1	259	0	73	463	20
7	3350.82	70,951	596	11	0	806	2	0	246	0	182	209	20
8	3351.51	71,606	655	0	0	1,234	0	0	227	0	345	-7	20
9	3351.33	71,435	-171	37	0	385	0	0	248	0	254	-91	20
10	3351.00	71,121	-314	49	0	201	4	0	282	0	300	22	20
11	3350.63	70,771	-350	41	0	127	4	0	279	0	171	-64	9
12	3350.28	70,440	-331	1	0	87	6	0	468	0	32	87	0
13	3350.10	70,271	-169	0	0	74	5	0	222	0	0	-16	0
14	3350.17	70,337	66	12	0	206	1	0	241	0	0	90	0
15	3350.17	70,337	0	12	0	204	0	0	213	0	0	-3	0
16	3349.85	70,035	-302	25	0	128	0	0	418	0	0	-37	0
17	3349.71	69,904	-131	0	0	138	0	0	401	0	0	132	0
18	3349.35	69,566	-338	23	0	112	4	0	373	0	40	-56	0
19	3348.98	69,220	-346	9	0	105	4	0	378	0	97	19	0
20	3348.72	68,977	-243	9	0	129	4	0	378	0	99	100	0
21	3348.39	68,670	-307	9	0	105	0	0	342	0	36	-43	0
22	3348.60	68,865	195	9	0	457	0	0	367	0	61	157	0
23	3351.34	71,444	2,579	8	0	4,690	1	0	330	0	1,720	-68	0
24	3351.32	71,425	-19	0	0	2,271	3	0	386	0	1,855	-46	0
25	3350.66	70,799	-626	8	0	654	2	0	336	0	1,057	107	0
26	3350.16	70,327	-472	8	0	380	3	0	338	0	569	50	0
27	3349.97	70,148	-179	8	0	284	1	0	361	0	163	54	0
28	3349.77	69,960	-188	13	0	241	0	0	359	0	114	31	0
Total			-359	367	0	13,948	55	1	8,651	0	7,208	1,241	236

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

Table 30. Lake Perris

Daily Operation

(in acre-feet except as noted)

Capacity: 131,452 ac-ft

February 1998

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow 1/	Outflow 2/	Computed Losses (-) Gains (+) 1/
#####	1579.51	107,949				
1	1579.52	107,971	22		9	
2	1579.54	108,014	43		9	
3	1579.65	108,252	238		9	
4	1579.65	108,252	0		10	
5	1579.66	108,274	22		10	
6	1579.71	108,382	108		10	
7	1579.75	108,468	86		9	
8	1579.84	108,663	195		10	
9	1579.87	108,728	65		11	
10	1579.87	108,728	0		10	
11	1579.87	108,728	0		10	
12	1579.87	108,728	0		10	
13	1579.88	108,750	22		10	
14	1579.97	108,945	195		10	
15	1579.97	108,945	0		10	
16	1580.00	109,010	65		10	
17	1580.03	109,075	65		10	
18	1580.07	109,161	86		11	
19	1580.07	109,161	0		10	
20	1580.09	109,205	44		10	
21	1580.12	109,270	65		11	
22	1580.17	109,378	108		11	
23	1580.42	109,921	543		11	
24	1580.49	110,073	152		11	
25	1580.49	110,073	0		13	
26	1580.51	110,117	44		10	
27	1580.49	110,073	-44		11	
28	1580.50	110,095	22		11	
Total			2,146	848	287	1,585

1/ Readings are not taken on a daily basis. End of month only.

2/ Includes deliveries to MWD from Reach 28J and recreation water to California State Park at lake Perris.

Table 31a. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (East Branch)

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver- sions	Deliveries									
	Beginning and Ending					Entitle- ment	Rec.	Transfer 1/	Ext. M & I Cry. Ovr. 2/	Transfer Local Out					
	No.	Structure	Mile												
17E 17F 18A	40	Edmonston Pumping Plant	293.45		8,050	232		57	0	0					
	41		298.65	Kern County Water Agency Tej.-Cas	Stub										
			Check No. 41	303.41											
	42	Check No. 42	304.99												
19	43	Alamo Powerplant	305.73	(Does not include 160 AF flow down Cottonwood Chute)	0										
			Check No. 43	309.70											
	44		311.84	LADWP Connection	0										
			313.50	AVEK 245th Street West	0										
			Check No. 44	314.81											
	45		314.93	AVEK 235th Street West	0										
			315.57	AVEK 225th Street West	0										
			Check No. 45	319.74											
	46		323.19	Antelope Valley-East Kern WA Fairmont	289										
			Check No. 46	323.84											
				Reach 19 Total:	289						232	0	57	0	0
20A	47	Check No. 47	326.77								13	521			
	48		326.91	Antelope Valley-East Kern WA Willow Springs Siphon	13										
			329.65	Antelope Valley-East Kern WA 120th Street West	Re- moved										
			Check No. 48	330.82											
	49	Check No. 49	335.93			50	521								
	50		336.73	AVEK WA - Quartz Hill (Wheeled for Palmdale WD)	0										
			Antelope Valley-East Kern WA	521											
20B		Check No. 50	341.51			121	10								
	51	Check No. 51	342.07												
	52		342.80	Antelope Valley-East Kern WA 30th Street West	Not in Use										
			Check No. 52	343.74											
	53		346.98	PWD Palmdale	121										
			348.14	Antelope Valley-East Kern WA Acton Treatment Plant	0										
		Check No. 53	348.17												
21	54	Check No. 54	350.25								10				
	55	Check No. 55	352.70												
	56	Check No. 56	354.76												
			354.97	Littlerock Creek I.D.	0										
		Check No. 57	356.93												
22A	58		357.72	Antelope Valley-East Kern WA 96th Street East	10	10									
22B			359.82	Antelope Valley-East Kern WA East Side Treatment Plant	113	113									

1/ Transferred from Mojave Water Agency to AVEK.

2/ Extended Municipal and Industrial Carryover Entitlement under Article 56 of the Monterey Agreement.

Table 31b. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

February 1998

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries				
	Beginning and Ending					Entitle-ment	Recreation	Ex-change 1/	Ext. M & I Cry. Ovr. 2/	Local
	No.	Structure	Mile							
22B	58	Pearblossom Pumping Plant	360.61		461	212	1	0	0	236
	59	Check No. 59	366.09							
	60	Check No. 60	373.94							
	61	Check No. 61	379.00							
	62	Check No. 62	384.26							
	63	Check No. 63	389.50							
	64	Check No. 64	395.10							
	65	Check No. 65	400.32							
	66		401.10	Mojave Water Agency Morongo 24" and 42"	212					
Mojave Water Agency Hesperia				0						
23	67	Mojave Siphon	405.48	Las Flores Ranch	236	2,189	3	0	0	0
		Mojave Siphon Powerplant	405.65		367					
		24		Silverwood Lake	407.65					
Calif. State Park Silverwood Agency (Rec.)	1									
25	68	San Bernardino Tunnel	411.46		8,651	2,189	3	0	0	0
				San Gorgonio Pass Water Agency	0					
26A	68	Devil Canyon Powerplant	412.73		8,651	4,383	1,231	39	284	0
		Devil Canyon Afterbay Control Structures	412.88	MWD-SC Rialto	4,383					
				Desert Water Agency (MWD Wheeling Exchange)	0					
				San Gabriel Valley Water District	1,231					
				Coachella Valley WD (MWD Wheeling Exchange)	0					
				San Bernardino Valley Metropolitan Water District	39					
				MWD (SBVMWD Exchange)	0					
28G	69	Santa Ana Valley Pipeline	425.46			2,189	0	0	0	
28H			433.06	MWD-SC Box Springs	2,189					
			440.05	MWD-SC Perris Bypass Pipeline	0					
28J			Lake Perris	443.44	MWD-SC 18"	284	284	0	0	0
					MWD-SC 54"	0				
	MWD-SC 78"				0					
				Calif. State Park Lake Perris Recreation	3					
				MWD Total:	19,973	19,973	0	0	0	0

1/ Returned from USBR in exchange for 1997 Ent. water.

2/ Extended Municipal and Industrial Carryover Entitlement under Article 56 of the Monterey Agreement.

Table 32. Water Quality At Selected SWP Locations

February 1998

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Banks Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct				Devil Canyon Afterbay Near San Bernardino
						O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachapi Afterbay (Check 41)	
Alkalinity	mg/l	33	67	72	67	70	78	62	85	70
Arsenic	mg/l	<0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Boron	mg/l	<0.1	<0.1	0.2	0.3	0.3	0.4	0.2	0.2	0.1
Bromide	mg/l	<0.01	0.02	0.17	0.10	0.11	0.13	NR	0.24	0.19
Calcium	mg/l	7	10	21	23	23	70	19	27	19
Carbon - Total Organic	mg/l	NR	12	5	6	6	5	NR	5	3
Chloride	mg/l	1	8	60	39	42	37	49	81	57
Chromium	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	mg/l	<0.001	0.003	0.004	0.002	0.006	0.003	0.003	0.004	0.005
Fluoride	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	0.1	<0.1
Hardness	mg/l	30	58	102	103	103	278	89	129	89
Iron	mg/l	<0.005	0.058	0.015	0.014	0.019	<0.005	0.019	0.009	<0.005
Lead	mg/l	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/l	3	8	12	11	11	25	10	15	10
Manganese	mg/l	<0.005	0.011	<0.005	0.016	0.006	0.007	<0.005	<0.005	<0.005
Nitrate + Nitrite	mg/l	0.04	0.18	1.20	NR	NR	NR	NR	1.70	0.58
Phosphorus-Ortho	mg/l	0.03	0.07	0.13	NR	NR	NR	NR	0.14	0.07
Phosphorus-Total	mg/l	0.01	0.32	0.18	NR	NR	NR	NR	0.16	0.07
Selenium	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	0.005	<0.001	<0.001	<0.001
Sodium	mg/l	3	14	50	39	40	78	41	67	44
Specific Conductance	mS	0.074	0.173	0.462	0.404	0.414	0.883	0.394	0.584	0.402
Sulfate	mg/l	1	6	48	59	58	298	42	60	26
Total Dissolved Solids	mg/l	45	95	258	233	237	593	227	317	220
Trihalomethane Formation Potential	µg/l	NR	877	597	839	150	645	630	602	438
Turbidity	µg/l	6	166	11	55	32	18	9	2	3
Zinc	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0

mg/l milligrams per liter

µg/l micrograms per liter

mS milliSiemens

NR - Not Reported

Table 33. Water Quality At Selected Delta Stations

February 1998

Date	Tides (feet above mean sea level)		Flow In CFS			Electrical Conductivity in milliSiemer									Cl in mg/l
	(Antioch) Daily Mean		Net Delta Outflow Index		Rio Vista	Antioch	Chippis Island	Emmaton		Jersey Point		Clifton Court	Cache Slough	Delta Mendota Canal	Contra Costa Canal Intake
			Mean Daily	Monthly Average											
	Hi	Half			md	md	md	md	14dm	md	14dm	md	md	md	md
1	4.30	2.66	138,466	138,466	117,443	0.24	0.00	0.15	0.15	0.20	0.20	0.45	0.61	0.47	152
2	4.42	2.67	138,094	138,280	125,533	0.24	0.00	0.16	0.15	0.20	0.20	0.38	0.62	0.42	133
3	5.63	3.69	154,478	143,679	177,338	0.23	0.00	0.15	0.15	0.19	0.20	0.38	-0.39	0.32	119
4	5.34	3.36	231,331	165,592	220,788	0.24	0.14	0.14	0.15	0.22	0.20	0.37	0.26	0.40	125
5	5.25	3.46	268,717	186,217	242,970	0.25	0.13	0.12	0.15	0.23	0.20	0.31	0.31	0.37	130
6	6.34	4.09	292,427	203,919	256,009	0.24	0.11	0.10	0.15	0.20	0.20	0.29	0.23	0.47	140
7	5.74	4.19	307,655	218,738	258,109	0.22	0.11	0.10	0.14	0.21	0.20	0.29	0.21	0.42	140
8	5.66	4.09	312,949	230,515	265,520	0.22	0.11	0.10	0.14	0.21	0.20	0.31	0.22	0.42	140
9	5.32	3.70	317,988	240,234	260,294	0.22	0.00	0.10	0.14	0.19	0.20	0.33	0.35	0.44	150
10	5.24	3.58	315,876	247,798	245,670	0.22	0.00	0.11	0.13	0.23	0.20	0.33	0.42	0.40	140
11	4.98	3.44	302,746	252,793	223,660	0.22	0.11	0.11	0.13	0.21	0.21	0.34	0.47	0.39	147
12	4.76	3.29	279,470	255,016	203,074	0.24	0.10	0.11	0.13	0.22	0.21	0.35	0.44	0.41	142
13	4.47	3.17	258,248	255,265	191,263	0.23	0.12	0.11	0.12	0.23	0.21	0.35	0.33	0.40	132
14	4.81	3.47	244,313	254,483	189,403	0.26	0.13	0.12	0.12	0.23	0.21	0.34	0.27	0.29	135
15	4.38	3.21	248,684	254,096	201,332	0.24	0.14	0.12	0.12	0.23	0.21	0.35	0.29	0.39	130
16	4.12	2.99	258,493	254,371	194,977	0.25	0.14	0.11	0.11	0.25	0.22	0.35	0.41	0.40	138
17	4.11	2.82	253,549	254,323	190,172	0.26	0.16	0.12	0.11	0.23	0.22	0.36	0.25	0.40	140
18	3.71	2.31	244,002	253,749	176,990	0.25	0.13	0.12	0.11	0.24	0.22	0.33	0.41	0.42	153
19	3.71	2.31	229,965	252,497	182,160	0.29	0.15	0.12	0.11	0.25	0.22	0.30	0.51	0.42	147
20	3.79	2.29	226,862	251,216	174,038	0.28	0.15	0.13	0.11	0.25	0.23	0.30	0.45	0.42	173
21	4.49	2.55	225,670	249,999	174,937	0.29	0.13	0.14	0.11	0.25	0.23	0.29	0.56	0.41	168
22	4.20	2.53	226,939	248,951	189,371	0.29	0.15	0.14	0.12	0.24	0.23	0.30	0.46	0.43	168
23	5.02	3.01	242,693	248,679	190,809	0.30	0.14	0.14	0.12	0.25	0.24	0.30	0.65	0.42	167
24	4.98	3.15	246,994	248,609	183,899	0.29	0.15	0.13	0.12	0.24	0.24	0.34	0.55	0.48	187
25	4.61	2.81	235,784	248,096	173,778	0.28	0.15	0.13	0.12	0.24	0.24	0.31	0.84	0.49	177
26	4.49	2.63	225,125	247,212	164,688	0.28	0.15	0.13	0.12	0.25	0.24	0.35	1.01	0.50	167
27	4.40	2.56	212,273	245,918	153,652	0.28	0.15	0.13	0.13	0.26	0.24	0.34	1.10	0.49	170
28	4.01	2.36	199,999	244,278	142,928	0.29	0.16	0.15	0.13	0.27	0.25	0.33	1.17	0.46	165

Clifton Court Cl(mg/l)=200X EC - 25

N.R. = No Record.

f = Excess Delta conditions with fish concerns.

r = Excess delta conditions with export/inflow ratio concernsmd = Daily Mean

s = Balanced water conditions with storage withdrawals. md = Mean Daily

**Table 34. Pesticides, Herbicides, and Other Organic
Substances Detected In the SWP**

February 1998

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant	September-17-1997	None Detected	
California Aqueduct At Banks Pumping Plant	September-17-1997	MTBE	1.70
Delta Mendota Canal At McCabe Road	September-17-1997	MTBE	2.30
California Aqueduct Near Kettleman City (Check 21)	September-17-1997	2/4 D	0.16
California Aqueduct At Tehachapi Afterbay (Check 41)	September-17-1997	None Detected	
Devil Canyon Power Plant At Entrance To Santa Ana Pipeline	September-17-1997	MTBE	2.30

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

Table 35. Oroville and Delta Field Divisions Energy Data

(in kWh)

February 1998

Date	Oroville Thermalito Complex		Barker Slough Pumping Plant Load	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Complex				Total Load	SWP Load		
	Generation	Load						
1	1,044,288	1,015,488	11,102	16,653	1,148,928	1,148,928	9,290	197
2	11,780,928	505,152	12,278	17,528	816,768	816,768	7,855	206
3	18,277,344	0	14,105	20,636	22,464	22,464	4,090	232
4	18,353,088	0	15,841	21,525	22,656	22,656	3,905	229
5	18,513,216	0	18,025	26,705	23,040	23,040	4,025	254
6	18,493,920	0	14,623	21,133	22,848	22,848	3,850	239
7	18,498,240	0	15,155	24,122	21,888	21,888	24,020	238
8	18,494,496	0	15,841	22,554	22,272	22,272	4,175	246
9	18,210,240	0	17,374	26,887	23,040	23,040	5,120	240
10	18,497,376	0	15,757	22,897	23,040	23,040	21,375	250
11	18,496,224	0	15,743	21,644	22,848	22,848	39,105	251
12	18,493,920	0	17,290	25,480	22,272	22,272	7,245	243
13	18,478,944	0	16,394	24,934	22,272	22,272	22,325	230
14	18,360,288	0	14,763	24,360	21,696	21,696	23,205	231
15	17,089,344	0	16,086	23,975	21,696	21,696	17,375	238
16	17,021,952	0	16,408	22,645	21,504	21,504	18,670	245
17	17,175,168	0	16,254	24,353	22,848	22,848	29,290	245
18	18,019,584	0	17,192	24,360	22,464	22,464	16,210	220
19	17,530,272	0	16,779	24,374	22,656	22,656	14,000	224
20	16,993,440	0	16,793	23,457	23,040	23,040	23,050	234
21	16,729,632	0	15,533	24,129	22,080	22,080	16,670	216
22	16,066,656	288	15,771	24,122	22,080	22,080	19,450	239
23	17,720,640	0	15,995	24,129	22,848	22,848	18,015	227
24	16,602,336	0	17,710	27,083	22,656	22,656	20,235	229
25	16,644,960	0	16,086	24,157	22,848	22,848	20,340	207
26	16,419,744	0	16,163	24,129	76,224	76,224	19,950	216
27	15,777,792	0	17,157	25,844	22,272	22,272	14,905	233
28	16,377,696	0	15,743	24,297	21,312	21,312	20,915	258
Total	470,161,728	1,520,928	443,961	658,112	2,602,560	2,602,560	448,660	6,517

Table 36. San Luis Field Division Energy Data

(in kWh)

February 1998

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	999,360	495,360	0	0	2,298,816	18,816
2	568,512	176,512	0	0	302,688	18,688
3	118,800	118,800	0	0	2,264,832	-39,168
4	13,104	13,104	0	0	3,047,040	35,040
5	374,544	176,544	0	0	2,236,320	4,320
6	194,832	86,832	0	0	1,463,616	15,616
7	192,960	96,960	0	0	1,725,120	17,120
8	13,248	13,248	0	0	3,369,312	8,312
9	72,000	48,000	0	0	1,977,120	15,120
10	263,376	155,376	0	0	2,221,920	25,920
11	205,920	97,920	0	0	2,747,520	26,520
12	246,816	138,816	0	0	3,749,760	-24,240
13	307,008	199,008	0	0	2,185,632	-10,368
14	203,040	95,040	0	0	1,984,896	-1,104
15	134,352	26,352	0	0	3,306,240	-29,760
16	245,808	117,808	0	0	2,177,280	-720
17	154,512	19,512	0	0	2,182,752	4,752
18	185,328	50,328	0	0	2,954,304	16,304
19	257,040	122,040	0	0	2,943,360	18,360
20	225,216	90,216	0	0	2,942,208	17,208
21	156,816	21,816	0	0	2,028,672	6,672
22	189,936	54,936	0	0	4,094,784	14,784
23	14,688	14,688	0	0	2,155,392	13,392
24	45,936	15,936	0	0	3,410,784	10,784
25	142,416	30,416	0	0	928,512	10,512
26	214,272	102,272	0	0	926,208	8,208
27	248,112	136,112	0	0	923,904	14,904
28	298,224	186,224	0	0	821,088	12,088
Total	6,286,176	2,900,176	0	0	63,370,080	228,080

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

Table 37. San Joaquin Field Division Pumping Plant Energy Load Data

(in kWh)

February 1998

Date	Coastal Branch					California Aqueduct			
	Las Perillas	Badger Hill	Devils Den	Bluestone	Polonio	Buena Vista	Teerink	Chrisman	Edmonston
1	23,092	61,104	34,326	32,094	35,442	246,312	227,808	544,320	1,888,560
2	7,892	21,384	16,398	15,336	17,064	221,256	211,536	501,696	1,746,000
3	2,196	3,688	14,616	14,832	15,714	173,448	201,168	451,008	1,740,960
4	4,642	11,080	36,990	33,750	36,432	175,608	182,448	424,224	1,622,880
5	3,952	8,936	35,370	33,534	35,550	188,208	207,144	492,480	1,749,600
6	3,648	7,440	31,032	29,286	33,012	201,168	211,176	486,144	1,748,880
7	3,820	8,488	33,930	31,212	33,606	184,104	212,760	468,576	1,749,600
8	5,992	13,288	33,912	32,598	35,064	311,184	353,448	775,296	2,964,960
9	2,722	5,528	27,000	24,336	26,964	174,744	147,168	401,472	1,262,880
10	3,536	8,528	28,800	27,126	29,844	139,248	162,360	330,624	1,263,600
11	2,666	4,616	13,680	12,834	13,986	34,416	10,656	24,192	45,360
12	4,604	9,872	33,516	32,328	34,236	41,544	10,656	23,904	45,360
13	3,008	6,208	33,930	31,266	34,524	54,216	23,688	57,888	45,360
14	4,324	10,520	33,876	31,446	34,686	41,184	9,576	23,616	177,840
15	3,438	6,184	18,090	16,884	17,784	35,064	9,864	23,328	46,080
16	4,402	8,888	34,092	32,130	34,362	34,848	9,648	41,472	159,120
17	3,012	7,504	34,092	32,112	35,550	60,120	10,224	25,344	45,360
18	6,378	13,768	33,372	31,302	33,192	71,928	40,392	57,312	167,760
19	4,062	9,840	17,226	16,632	17,712	84,672	58,104	127,296	404,640
20	4,902	9,904	33,822	32,526	35,892	47,952	11,664	39,456	105,840
21	6,460	13,744	29,574	26,820	29,394	9,504	10,296	23,328	45,360
22	2,438	5,512	17,172	16,740	17,784	34,344	29,232	60,768	46,080
23	5,946	13,040	33,084	30,816	34,218	34,704	10,440	24,480	46,080
24	1,674	2,488	20,232	19,260	20,142	10,584	11,016	24,480	41,760
25	5,410	11,800	33,624	31,608	35,244	10,440	9,792	25,056	42,480
26	3,494	7,112	17,622	16,686	17,712	10,584	9,720	24,192	42,480
27	4,780	10,672	39,150	31,824	34,704	60,192	33,048	72,288	43,920
28	4,006	8,896	33,966	32,004	34,704	40,824	9,360	23,040	45,360
Total	136,496	310,032	802,494	749,322	814,518	2,732,400	2,434,392	5,597,280	19,334,160

Table 38. Southern Field Division Energy Data

(in kWh)

February 1998

Date	West Branch			East Branch			
	Oso	Warne	Castaic	Alamo	Pearblossom	Mojave Siphon	Devil Canyon
	Pumping Plant Load	Powerplant Generation	Powerplant SWP Generation	Powerplant Generation	Pumping Plant Load	Powerplant Generation	Powerplant Generation
1	223,160	0	720,000	0	18,204	0	313,536
2	205,744	612,072	720,000	0	17,244	0	296,256
3	203,784	585,432	720,000	0	13,152	0	255,168
4	191,632	556,344	720,000	0	16,944	0	309,120
5	204,792	525,888	720,000	0	23,076	0	303,360
6	205,744	581,544	720,000	0	17,220	0	316,320
7	207,368	481,896	720,000	0	16,992	0	304,704
8	359,016	478,656	720,000	0	16,632	0	281,664
9	156,128	478,800	600,000	0	61,848	0	303,264
10	149,296	399,672	600,000	0	60,960	0	347,328
11	11,088	0	600,000	0	52,908	0	342,336
12	11,088	0	600,000	0	37,044	0	590,592
13	10,696	0	600,000	0	44,748	0	270,336
14	26,992	0	600,000	0	52,128	0	294,912
15	11,648	0	600,000	0	46,560	0	257,760
16	29,568	0	1,620,000	0	49,092	0	518,592
17	10,976	0	1,710,000	0	17,940	0	493,440
18	11,816	0	2,400,000	0	14,880	0	451,200
19	38,640	0	2,400,000	0	14,904	0	454,560
20	11,928	0	2,400,000	0	16,020	0	453,408
21	11,592	0	2,400,000	0	14,328	0	408,480
22	11,256	0	2,190,000	0	13,356	0	440,544
23	11,760	0	384,000	0	14,412	0	395,712
24	11,760	0	384,000	0	15,444	0	461,856
25	11,704	0	384,000	0	15,804	0	400,416
26	11,760	0	384,000	0	3,888	0	400,800
27	11,088	0	384,000	0	16,116	0	430,464
28	25,984	0	384,000	0	14,160	0	431,520
Total	2,388,008	4,700,304	27,384,000	0	716,004	0	10,527,648